PTO/SB/08A (08-00)

3405786

Approved for use through 10/31/2002. OMB 0651-0031 U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

(+) inside this box -> III

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Substitute for form 1449A/PTO

1

ATP)

Sheet

(use as many sheets as necessary)

of

	Complete if Known					
Application Number	10/608,907	_				
Filing Date	June 27, 2003					
First Named Inventor	Storer et al.					
Group Art Unit	1623	_				
Examiner Name	Traviss C. McIntosh III	_				
Attorney Docket Number	06171.105084 IDX 1018	_				

		U.S	. PATENT DOCUMENTS			5786_1
Examiner Initials *	Cite No. 1	U.S. Patent Document Number Kind Code (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages/Relevant Figures Appear	T ⁶
TM	AA	4,814,477	Wijnberg et al.	03-21-1989		
	AB 4,952740 Sylvain et al.		08-28-1990			
	AC	5,223,263	Hostetler et al.	06-29-1993		
	AD	5,780,617	van den Bosch et al.	05-31-1994		
	AE	5,696,277	Hostetler et al.	12-09-1997		T
	AF	5,763,418	Matsuda et al.	06-09-1998		
	AG	5,789,608	Glazier	08-04-1998		
	AH	6,172,046	Albrecht	01-09-2001		
	ΑI	6,252,060	Hostetler et al.	06-26-2001		
	AJ	2003/0008841	Devos et al.	08-07-2001		
	AK	6,277,830	Ganguly et al.	08-21-2001		
	AL	6,348,587	Schinazi et al.	02-19-2002		1
	AM	2002/0055483	Watanabe et al.	05-09-2002		
	AN	2002/0055473	Ganguly et al.	05-09-2002		1
	AO	2002/0095033	Ramasamy et al.	07-18-2002		
	AP	6,436,437	Yatvin et al.	08-20-2002		
	AQ	6,448,392	Hostetler et al.	09-10-2002		
	AR	6,448,392	Hostetler et al.	09-10-2002		
	AS	2002/0127203	Albrecht	09-12-2002		
	AT	6,472,373	Albrecht	10-29-2002		
	AU	6,495,677	Ramasamy et al.	12-17-2002		
	AV	2002/0198171 Schinazi et al. 12-26-2002		12-26-2002		
	AW	2003/0008841 Devos et al. 01-09-2003		01-09-2003		
	AX	AX 2003/0050229 LaColla et al. 03-13-2003		03-13-2003		
	AY	2003/0055013	Brass	03-20-2003		
	AZ	2003/0053986	Zahm	03-20-2003		
V	AAA	2003/0060400	LaColla et al.	03-27-2003		
TM	AAB	2003/0087873	Stuyver et al.	05-08-2003		

08/09/2006 Examiner Date /Traviss Mcintosh III/ (08/09/2006) Signature Considered

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. 2 See attached Kinds of U.S. Patent Documents. 3 Enter Office that issued the document; by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ³ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

PTC/SB/08A (08-00)
Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO		Complete if Known		
Substitute for form 1449AFTO	Application Number	10/608,907		
INFORMATION DISCLOS	URE Filing Date	June 27, 2003		
STATEMENT BY APPLICA	NT First Named Inventor	Storer et al.		
	Group Art Unit	1623		
(use as many sheets as necessary)	Examiner Name	Traviss C. McIntosh III		
2 of 4	Attorney Docket Number	06171.105084 IDX 1018		

		. — — — — — — — — — — — — — — — — — — —			3403	5786_1
		U.	S. PATENT DOCUMENTS			
Examine Initials *		U.S. Patent Document Number Kind Code (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages/Relevant Figures Appear	T ⁶
TM	BA	6,566,365	Storer et al.	05-20-2003		
	BB	6,573,248	Ramasamy et al.	06-03-2003		
	BC	6,599,887	Hostetler et al.	07-29-2003		
	BD	2003/0225029	Stuyver et al.	12-04-2003		
	BE	6,660,721	Devos et al.	12-09-2003		
	BF	2004/0002476	Stuyver et al.	01-01-2004		
	BG	2004-0023921	Yao et al.	02-05-2004		
	ВН	2004/0059104	Cook et al.	03-25-2004		
	BI	2004/0063658	Roberts et al.	04-01-2004		
	BJ	2004/0067901	Bhat et al.	04-08-2004		
	BK	2004/0072788	Bhat et al.	04-15-2004		
	BL	2004/0077587	Sommadossi et al.	04-22-2004		
	BM	2004/0110717	Bhat et al.	06-10-2004		П
	BN	2004/0110718	Devos et al.	06-10-2004		
	ВО	6,752,981	Erion et al.	06-22-2004		
	BP	2004/0147464	Roberts et al.	07-29-2004		
	BQ	6,777,395	Bhat et al.	08-17-2004		
	BR	6,784,166	Devos et al.	08-31-2004		
	BS	6,784,161	Ismaili et al.	08-31-2004		
	BT	2004/0266722	Devos et al.	12-30-2004		
	BU	2004/0266723	Otto et al.	12-30-2004		
	BV	BV 2005/0009737 Clark et al. 01-13-2005				
	BW	BW 6,846,810 Martin et al. 01-25-2005				
	BX 6,875,751		Imbach et al.	04-05-2005		
	BY	2005/0119200	Roberts et al.	06-02-2005		
W	BZ	6,911,424	Schinazi et al.	06-28-2005		
TM	BAA	6,965,066	Jiang et al.	11-15-2005		

Examiner	/Traviss Mcintosh III/ (08/09/2006)	Date	08/09/2006
Signature	/114V188 McIncosh 111/ (00/03/2000)	Considered	08/03/2000

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ³ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

	The second in th							
Substitute for form 1449A/PTO	Substitute for form 1449A/PTO			Complete if Known				
			Application Number	10/608,907				
INFORMATION I	DISCL	OSURE	Filing Date	June 27, 2003				
STATEMENT BY	APPL	ICANT	First Named Inventor	Storer et al.				
fura de many chaste			Group Art Unit	1623				
(use as many sheets as necessary)			Examiner Name	Traviss C. McIntosh III				
3	of	4	Attorney Docket Number	06171.105084 IDX 1018				
				•				

							3405	3786 <u>I</u>		
	FOREIGN PATENT DOCUMENTS									
Examiner Cite Initials • No.		No. 1 Office 3 Number Kind Code2			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document	Pages, Columns, Lines, Where Relevant Passages/ Relevant	T ⁶		
TM	CA	GB	1163 103	Kilowii)	Merck	мм-DD-YYYY 09-04-1969	Figures Appear	\vdash		
	СВ	GB	1163 102		Merck	09-04-1969	·	1		
	CC	GB	1209 654		Merck	10-21-1970				
	CD	EP	0747 389		Taiho Pharmaceutical Co. Ltd.	12-11-1996				
	CE	wo	03/051899		Girardet et al.	06-26-2003		T		
	CF	wo	03/061385		An et al.	07-31-2003				
	CG	wo	03/061576		An et al.	07-31-2003				
	СН	wo	03/062256	:	An et al.	07-31-2003		1		
	CI	wo	03/062257		An et al.	07-31-2003		1		
	Cl	wo	03/062255		Hong et al.	07-31-2003				
\ /	CK	wo	04/000858		Carroll et al.	12-31-2003		\Box		
V	CL	wo	04/007512	A2	Merck & Co., Isis Pharmaceutical	01-22-2004				
TM	СМ	wo	06/012440	A2	Wang et al.	02-02-2006				

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS						
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T⁴			
TM	CN	AWANO, H., et al., "Nucleosides and nucleotides. Part 144. Synthesis and antiviral activity of 5-substituted (2'S)-2'-deoxy-2'-C-methylcytidines and -uridines," Archiv der Pharmazie, VCH Verlagsgesellschaft mbh, Weinheim, DE. 329:66-72 (February 1, 1996).				
TM	СО	BEIGELMAN, L.N., et al, "A general method for synthesis of 3'-C-alkylnucleosides," Nucleic Acids Symp. Ser., 9:115-118 (1981).				
TM	CP	CAPPELLACCI, L., et al., "Ribose-modified nucleosides as ligands for adenosine receptors: Synthesis, conformational analysis, and biological evaluation of 1'-C-methyl adenosine analogues," J. Med. Chem., 45:1196-1202 (2002).				
TM	CQ	FEDEROV, I.I., et al., "3'-C-branched 2'-deoxy-5-methyluridines: Synthesis, enzyme inhibition, and antiviral properties," J. Med. Chem., 35:4567-4575 (1992).				
	CR	FRANCHETTI, P., et al., "2'-C-Methyl analogues of selective adenosine receptor agonists: synthesis				
TM		and binding studies," J. Med. Chem., 41(10):1708-1715 (1998).				
TM	CS	HATTORI, H., et al., "Nucleosides and nucleotides. 158.," J. Med. Chem., 39:5005-5011 (1996).				

	_				
Examine Signatur	1	/Traviss Mcintosh III/	(08/09/2006)	Date Considered	08/09/2006

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ³ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Approved for use through 10/31/2002. OMB 0651-0031 U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

-	Ottoel the Paperwol	x reductio	ii Act of 1993, its perso	its are required to respond to a confection	n of information unless it contains a valid QMB control number.			
ubstitute for form 1449A/PTO					Complete if Known			
would	C 107 107111 1449701 10			Application Number	10/608,907			
NFORMATION DISCLOSURE STATEMENT BY APPLICANT				Filing Date	June 27, 2003			
				First Named Inventor	Storer et al.			
	(usa sa manu shaata		1	Group Art Unit	1623			
(use as many sheets as necessary)			ary)	Examiner Name	Traviss C. McIntosh III			
	4	of	4	Attorney Docket Number	06171.105084 IDX 1018			

		3405	5786 1
		OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS	
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	Τ°
TM I	DA	HREBABECKY, H., et al., "Nucleic acid components and their analogues. CXLIX. Synthesis of pyrimidine nucleosides derived from 1-deoxy-D-psicose," Collect. Czech. Chem. Commun., 37:2059-2065 (1972).	
	DB	HREBABECKY, H., et al. "Synthesis of 7- and 9-β-D-psicofuranosylguanine and their 1'-deoxy derivatives," Collect. Czech. Chem. Commun., 39:2115-2123 (1974).	
	DC	JOHNSON, C.R., et al, "3'-C-Trifluoromethyl ribonucleosides," Nucleosides & Nucleotides, 14(1&2):185-194 (1995).	
	DD	LI, NanSheng., et al., "2'-C-branched ribonucleosides. 2. Synthesis of 2'-C-β-trifluoromethyl pyrimidine ribonucleosides," Organic Letters, 3(7):1025-1028 (2001).	
DE		MATSUDA, A., et al., "Radical deoxygenation of <u>tert-alcohols in 2'-branched-chain sugar pyrimidine</u> nucleosides: Synthesis and antileukemic activity of 2'-deoxy-2'(<u>S</u>)-methylcytidine," <i>Chem. Pharm. Bull.</i> , 35(9):3967-3970 (1987).	
_	DF	MATSUDA, A., et al., "Nucleosides and Nucleotides. 94. Radical deoxygenation of tert-alcohols in 1-(2-C-alkylpentofuranosyl)pyrimidines: Synthesis of (2'S)-2'-deoxy-2'-C-methylcytidine, an antileukemic nucleoside, "J. Med. Chem., 34:234-239 (1991).	
	DG	MIKHAILOV, S.N., et al., "Synthesis and properties of 3'C-methylnucleosides and their phosphoric esters," Carbohydrate Research, 124:75-96 (1983).	
	DH	MURAL, Y., et al., "A synthesis and an X-ray analysis of 2'-C-, 3'-C- and 5'-C-methylsangivamycins," Heterocycles, 1(33):391-404 (1992).	
	DI	ONG, S.P., et al, "Synthesis of 3'-C-methyladenosine and 3'-C-methyluridine diphosphates and their interaction with the ribonucleoside diphosphate reductase from Corynebacterium nephridii," Biochemistry, 31(45):11210-11215 (1992).	
	DJ	ROSENTHAL, A., et al., "Branched-chain sugar nucleosides. Synthesis of 3'-C-ethyl (and 3'-C-butyl)uridine Carbohydrate Research, 79:235-242 (1980).	Γ
	DK	SCHMIT, C., "Synthesis of 2'-deoxy-2'-α-monofluoromethyl and trifluoromethylnucleosides," Synlett, Thieme Verlag, Stuttgart, DE, (4):241-242 (1994).	
	DL	SHARMA, P.K., et al., "Synthesis of 3'-trifluoromethyl nucleosides as potential antiviral agents," Nucleosides, Nucleotides and Nucleic Acids, 19(4):757-774 (2000).	
Ψ	DM	TRONCHET, J.M.J.; et al., "72. Synthèse et désamination enzymatique des C-hydroxyméthyl-3'-et C-méthyl-3'-beta-D-xylofurannosyl-9-adénin es," Helv. Chim. Acta, 62:689-695 (1979).	
TM	DN	WOLF, J., et al., "New 2'-C-branched-chain sugar nucleoside analogs with potential antiviral or antitumor activity," Synthesis, Georg Thieme Verlag. Stuttgart, DE, (8):773-778 (August 1992).	

3405786 1

Examiner Signature	/Traviss Mcintosh III/ (08/09/2006)	Date Considered	08/09/2006
- 8	<u></u>	Considered	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ³ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

1

of

Sheet

Approved for use through 10/31/2002. OMB 0651-0031

06171.105084 IDX 1018

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE no persons are required to respond to a collection of information unless it contains a valid OMB control number. Under the Paperv Complete if Known Substitute for form 1449A/PTO Application Number 10/608,907 **INFORMATION** Filing Date June 27, 2003 STATEMENT BY First Named Inventor Sommadossi et al. Group Art Unit Unassigned (use as many sheets as necessary) Examiner Name Unassigned

Attorney Docket Number

				U.S. PATENT DOCUMENT	S	
Examiner Initials *	Cite No. 1	U.S. Patent I Number	Oocument Kind Code (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pgs, Cimns, Las, Where Relevant Passages/Relevant Figs Appear

2

				FOREIG	N PATENT DOCUMENT	S				
Examiner Initials *	Cite	Fo Office	Oreign Patent Document Kind Code ^{2 2} Number (if known)		Name of Patentee or Applicant of Cited	Date of Publication of Cited Document	Pages, Columns, Lines, W Relevant Passages/Relev			
110		Office	Muniber	(II KHOWE)	Document		Figures Appear			
TM	AA	FR	1521076		Merck, & Co.	04-12-1968				
	AB	ЛР	06211890		Yamasa Shoyu Co. Ltd.	08-02-1994				
	AC	JP	06228186		Yamasa Shoyu Co. Ltd.	08-16-1994				
	AD	wo	01/90121		Novirio Pharmaceuticals Ltd.	11-29-2001				
\ /	AE	wo	01/92282		Novirio Pharmaceuticals Ltd.	12-06-2001				
V	AF	wo	01/60315		Biochem Pharma Inc.	08-23-2001		-		
TM	AG	wo	03/105770		Bhat Balkrishen	12-24-2003				
		,			ON PATENT LITERATUR					
Examiner Initials *	Cite No. 1			magazine, jou	CAPITAL LETTERS), title or roal, serial, symposium, cata ublisher, city and/or country	alog, etc.), date, pa		Т6		
TM	AH	no. 36.,	Set 8, 1997	nthesis of a N	ew Carbocyclic Nucleoside	e Analog" Tetrahe		-		
TM	ΑI	1,3-Dip		lition: A New	ctive Synthesis of 2'-Amii Efficient Entry Toward d4					
TM	AJ	CZERNECKI, et al., "Synthesis of 2'-Deoxy-2'-Spirocyclopropyl Cytidine as Potential inhibitor of Ribonucleotide Diphosphate Reductase" Can J. Chem, vol. 71, 1993, 413-416								
TM	AK	HASSA Control [(Alkox	AN, et al., " lled Diastered cycarbonyl)mei	Nucleosides of ofacial Select hylene]-2'-de	and Nucleotides. 156. Cl ive Thiophenol Addition oxyuridines: Conversion (ASSAN, et al., "Nucleosides and Nucleotides. 156. Chelation-Controlled and Nonchelation-ontrolled Diastereofacial Selective Thiophenol Addition Reactions at the 2'Position of 2'-Alkoxycarbonyl)methylene]-2'-deoxyuridines: Conversion of (Z)-2'-[(Alkoxycarbonyl)methylene]-Deoxyuridines into Their (E)-Isomers ¹ " J. Org. Chem., vol. 62, 1997, pp 11-17				

Examine Signature	/Traviss Mcintosh III/ (08/09/2006)	Date Considered	08/09/2006

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ³ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

				Complete if Known			
Submitted for	form 1449/PTO			Application Number	10/608,907		
				Filing Date	June 27, 2003		
INI	FORMATION	DISCL	OSURE	First Named Inventor	Sommadossi et al.		
ST	ATEMENT BY	Y APPL	ICANT	Group Art Unit	Unassigned		
				Examiner	Unassigned		
Sheet	2	of	2	Attorney Docket Number	06171.105084 IDX 1018		

		OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS	
Examiner Initials *	Cite No. 1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	Té
TM	BA	HASSAN, et al., "Nucleosides and Nucleotides. 151. Conversion of (Z)-2"-(Cyanomethylene)-2'-Deoxyuridines into Their (E)-Isomers via Addition of Thiophenol to the Cyanomethylene Moiety Followed by Oxidative Syn-Elimination Reactions ¹ " J. Org Chem., vol. 61, 1996, pp. 6261-6267	
TM	BB	HOSSAIN, et al., "Synthesis of 2'-and3"-Spiro-Isoxazolidine Derivatives of Thymidine &Their Conversions to 2',3'-Dideoxy-2',3'-Didehydro-3'-C-Substituted Nucleosides by Radical Promoted Fragmentation" Tetrahedron, vol. 49, no. 44, 1993, pp. 10133-156	
TM	ВС	MAHMOUDIAN, M. et al., "A Versatile Procedure for the Generation of Nucleoside 5'-Carboxylic Acids Using Nucleoside Oxidase" Tetrahedron, vol. 54, no. 28, 9 July 1998	
TM	BD	VELAZQUEZ, et al., "Synthesis of [1-[3',5'-Bis-O-(tert-butyldimethylsilyl)-β-D-arabino- and β-Dribofuranosyl]cytosine]-2'-spiro-5"-(4"-amino-1",2"-oxathiole-2",2"-dioxide). Analogues of the Highly Specific Anti-HIV-1 Agent TSAO-T" Tetrahedron, vol. 50, 1994, pp. 11013-22°	
		,	

البيان			
Examiner Signature	/Traviss Mcintosh III/ (08/09/2006)	Date Considered	08/09/2006

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Complete if Known Substitute for form 1449A/PTO Application Number 10/608,907 INFORMATION DISCLOSURE Filing Date June 27, 2003 STATEMENT BY APPLICANT First Named Inventor Sommadossi et a **Group Art Unit** Unassigned (use as many sheets as necessary) **Examiner Name** Unassigned Attorney Docket Number Sheet 06171.105034 IDX 1018

						3405	5734_1
			U.S	5. PATENT DOCUMENTS		,	
Examiner Initials *	Cite No. 1		ent Kind Code f known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages/Relevant Figures Appear	T6
TM	AA	3,798,209		Wilkowski, et al.	03-19-1974		\top
	AB	RE29,835		Witkowski et al.	11-14-1978		
	AC	4,522,811		Eppstein et al.	06-11-1985		1
	AD	4,957,924		Beauchamp	09-18-1990		\top
	ΑE	5,149,794		Yatvin et al.	09-22-1992		_
	AF	5,157,027		Biller et al.	10-20-1992	•	\top
	AG	5,194,654		Hostetler et al.	03-16-1993		\top
	AH	5,223,263		Hostetler et al.	06-29-1993		\top
	ΑI	5,256,641		Yatvin et al.	10-26-1993		T
	AJ	5,411,947		Hostetler et al.	05-02-1995		\vdash
	AK	5,463,092		Hostetler et al.	10-31-1995		
	AL	5,543,389		Yatvin <i>et al.</i>	08-06-1996		十
	AM	5,543,390		Yatvin et al.	08-06-1996		\vdash
	AN	5,543,391		Yatvin <i>et al</i> .	08-06-1996		\vdash
V	AO	5,554,728		Basava et al.	09-10-1996		<u> </u>
TM	AP	6,312,662	Bl	Erion et al.	11-06-2001		

			_	FORI	EIGN PATENT DOCUMENTS		<u> </u>	
Examiner Initials *	Cite No. 1	Office ³	eign Patent Do Number	Kind Code ² (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages/ Relevant Figures Appear	Te.
TM	AQ	DE	3,512,781	Al	Soc. Nat. Elf Aquitaine	10-17-1985		
	AR	EP	0,180,276	Bl	Stamicarbon B.V.	12-19-1988		1
	AS	EP	0,350,287	B1	Chimerix	09-27-2000	_	
	AT	EP	0,650,371	B1	State of Oregon	11-15-2000		<u> </u>
	AU	wo	89/02733	Al -	Regents of the Univ. of California	04-06-1989		_
V	AV	wo	90/00555	Al	Vical Inc.	01-25-1990		
TM	AW	wo	91/16920	A1	Vical Inc.	11-14-1991	-	T

Examiner Signature /Traviss Mcintosh III/ (08/09/2006)	Date Considered	08/09/2006
--	--------------------	------------

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Skind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. Applicant is to place a check mark here if English language Translation is attached.

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OME contains a valid OME contains a valid OME.

Substitute	for form 1449A/PTO				Complete if Known	70	11 E	7
3403(114)(101 101111 1447/01 10			Application Number	10/608,907	/		ন্তা
INFO	DRMATION D	ISCL	OSURE	Filing Date	June 27, 2003	FEB	1 0 2004	100
STA	TEMENT BY	APPL	ICANT	First Named Inventor	Sommadossi et al.	193		11
	(use as many sheets		1	Group Art Unit	Unassigned	Tay.	and ge	• •
	(use as many sneets	as necessa	<i></i>	Examiner Name	Unassigned	1	10	
	2	of	7	Attorney Docket Number	06171.105034 IDX 10	018		

_							3405	734
				FOR	EIGN PATENT DOCUMENTS			
Examiner Initials *	Cite No. 1	Office 3	(i	ment d Code ² f known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages/ Relevant Figures Appear	T ⁶
TM	BA	wo	91/18914	Al	Vical Inc.	12-12-1991		
	BB	wo	91/19721	Al	Glazier	12-26-1991		
	BC	wo	93/00910	A1	Vical Inc.	01-21-1993		
	BD	wo	94/26273	Al	Hostetler	11-24-1994		
	BE	wo	96/15132	A1	Regents of the Univ. of California	05-23-1996		
	BF	wo	99/15194	A1	Schering Corporation	04-01-1999		
	BG	wo	99/43691	Al	Emory; U. Georgia Res. Found.	09-02-1999		
	ВН	wo	99/45016	A2	Metabasis Therapeutics Inc.	09-10-1999		
	BI	wo	99/59621	Al	Schering Corporation	11-25-1999		
	BJ	wo	99/64016	A1	Hoffman-La Roche AG	12-16-1999		
	BK	wo	00/24355	Al	Smith & Nephew Kinetic	05-04-2000	-	
	BL	wo	00/37110	A2&3	Schering Corporation	06-29-2000		
	BM	wo	00/52015	A2&3	Metabasis Therapeutics	09-08-2000		
	BN	wo	01/18013	Al	Metabasis Therapeutics	03-15-2001		
	BO	wo	01/32153	A2	Biochem Pharma	10-05-2001		
	BP	wo	01/47935	A2&3	Metabasis Therapeutics	07-05-2001		
	BQ	wo	01/60315	A2	Biochem Pharma	08-23-2001		
	BR	wo	01/79246	A2&3	Pharmasset	10-25-2001		
	BS	wo	01/81359	Al	Schering Corporation	11-01-2000		
	BT	wo	01/90121	A2&3	Novirio (Idenix); Univ Cagliari	11-29-2000		
	BU	wo	01/92282	A2&3	Novirio (Idenix); Univ Cagliari	06-12-2001		
	BV	wo	01/96353	A2&3	Novirio Pharm. (Idenix); C.N.R.S.	21-20-2001		
	BW	wo	02/057287	A2&3	Merck; Isis Pharmaceuticals	07-25-2002	# "	
	ВХ	wo	02/057425	A2	Merck; Isis Pharmaceuticals	07-25-2002		
	BY	wo	02/18404	A2&3	Hoffman-La Roche AG	03-07-2002		
	BZ	wo	02/32414	A2&3	Schering Corporation	04-25-2002		
()	BAA	wo	02/32920	A2	Pharmasset	04-25-2002		
V	BAB	wo	02/48165	A2&3	Pharmasset	06-20-2002	i	
TM	BAC	wo	03/024461	Al	Schering Corporation	03-27-2003		

Examiner Signature	/Traviss Mcintosh III/ (08/09/2006)	Date Considered	08/09/2006

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

3405734 1

PTO/SB/08A (08-00)
Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
to a collection of information unless it contains a valid OMB-coatrol number

Under the Paperwork Reduction Act of 1995, no persons are require

Substitute for form 1449A/PTO Complete if Known Complete if Known	
	13'
Application Number 10/608,907	न्त्री
INFORMATION DISCLOSURE Filing Date June 27, 2003 FEB 1 0	2004
STATEMENT BY APPLICANT First Named Inventor Sommadossi et al.	4.
(use as many sheets as necessary) Group Art Unit Unassigned	J.J
Examiner Name Unassigned	in the same
3 of 7 Attorney Docket Number 06171.105034 IDX 1018	

	FOREIGN PATENT DOCUMENTS								
Examiner Initials *	Cite No. 1	For Office 3	eign Patent Do	cument Kind Code ² (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages/ Relevant Figures Appear	T ⁶	
TM	CA	wo	04/003138	A2	Merck & Co., Isis Pharmaceutical	01-08-2004		1	
TM	СВ	wo	04/007512	A2	Merck & Co., Isis Pharmaceutical	01-22-2004			
TM	CC	wo	04/009020	A2	Merck & Co., Isis Pharmaceutical	01-29-2004			

		OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS	
Exami Initials		in the state of the state of the state of the matter (when appropriate), the of the field (book, magazine,	Té
TM CD		BAGINSKI, S. G, et al., "Mechanism of action of a pestivirus antiviral compound," PNAS USA, 97(14): 7981-7986 (2000).	
Chronic Hepatitis C Infection", Ann. Pharmacother, 34:487-494 (2000).			
	CI	BERENGUER, M. et al., "Hepatitis C virus in the transplant setting", Antivir. Ther., 3 (Suppl 3):125-136 (1998).	
CG BERMAN, E on normal hu		BERMAN, E, et al., "Synergistic cytotoxic effect of azidothymidine and recombinant interferon alpha on normal human bone marrow progenitor cells," Blood, 74(4):1281-1286 (1989)	
CH BHAT et al. (Oral Session V, Hepatitis C Virus, Flaviviridae, 20 Flaviviridae; 16 th International Conference on Antiviral Research A75).		BHAT et al. (Oral Session V, Hepatitis C Virus, Flaviviridae, 2003 (Oral Session V, Hepatitis C Virus, Flaviviridae; 16 th International Conference on Antiviral Research (April 27, 2003, Savannah, Ga.); p A75).	
	C	BROWNE, M.J., et al., "2',3'-didehydro-3'-deoxythymidine (d4T) in patients with AIDS or AIDS-Related Complex: A Phase I trial," J. Infect. Dis., 167(1):21-29 (1993).	
	C.	mitochondrial toxicity of fialurdine (FIAU)," Antiviral Res., 29(2-3): 125-39 (1996).	
CK CUI, L., e. 1-β-D-arai			
CL DAVI		DAVIS, G.L., "Current therapy for chronic Hepatitis C," Gastroenterology 118:S104-S114 (2000).	
\downarrow	CN	De FRANCESCO, R., et al., "Approaching a new era for hepatitis C virus therapy: inhibitors of the NS3-4A serine protease and the NS5B RNA-dependent RNA polymerase," Antiviral Research, 58: 1-16 (2003).	
TM	CN	De LOMBAERT, S., et al., "N-Phosphonomethyl dipeptides and their phosphonate prodrugs, a new generation of neutral endopeptidase (NEP, EC 3.4.24.11) inhibitors," J. Med. Chem., 37:498-511 (1994).	

Examiner Signature /Traviss Mcintosh III/ (08/09/2006)	Date Considered	08/09/2006
--	--------------------	------------

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCI.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

				Complete if Known
Substitute for form 1449A/PTO			A = 1' - 2' - 5' - 5	Complete if Known
		Application Number	10/608,907	
INFORMATION D	ISCLO:	SURE	Filing Date	June 27, 2003
STATEMENT BY APPLICANT		CANT	First Named Inventor	Sommadossi et al.
(use as many sheets as necessary)			Group Art Unit	Unassigned
(use us many sneets a			Examiner Name	Unassigned
4	of 7	7	Attorney Docket Number	06171.105034 IDX 1016

		3105	734_]
		OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS	-
Examiner Initials •	Cite No. 1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T _e
TM	DA	DORNSIFE, R.E., et al, "In vitro potency of inhibition by antiviral drugs of hematopoietic progenitor colony formation correlates with exposure at hemotoxic levels in Human Immunodeficiency Viruspositive humans," Antimicrob. Agents Chemother., 40(2):514-519 (1996).	
	DB	DYMOCK, B.W., et al., "Review: Novel approaches to the treatment of hepatitis C virus infection," Antiviral Chemistry & Chemotherapy, 11(2):79-95 (2000).	
Antiviral Research (April 27, 2003, Savannah, Ga.).			
DD FARKAS, J., et al., "Nucleic acid components and their analogues. XCIV. Synthesis of 6-amino		FARKAS, J., et al., "Nucleic acid components and their analogues. XCIV. Synthesis of 6-amino-9-(1-deoxy-β-D-psicofuranosyl)purine", Collect. Czech. Chem. Commun. 32:2663-2667 (1967).	
	DE	FARKAS, J., et al., "Nucleic acid components and their analogues. LXXIX. Synthesis of methyl 1-deoxy-D-psicofuranosides substituted at C ₍₁₎ with halo atoms or a mercapto group," Collect. Czech. Chem. Commun., 31:1535-1543 (1996).	
	DF	FARQUHAR, D., et al., "Synthesis and biological evaluation of neutral derivatives of 3-fluoro-2'-deoxyuridine 5'-phosphate," J. Med. Chem. 26: 1153 (1983);	
	DG	FARQUHAR, D., et al., "Synthesis and biological evaluation of 9-[5'-(2-oxo-1,3,2-oxazaphosphorinan-2-yl)-β-D-arabinosyl]adenine and 9-[5'-(2-oxo-1,3,2-dioxazaphosphorinan-2-yl)-β-D-arabinosyl]adenine: Potential neutral precursors of 9-[β-D-arabinofuranosyl]adenine 5'-monophosphate," J. Med. Chem. 28:1358-1381 (1985).	
	DH	FERRARI R., et al., "Characterization of soluble hepatitis C virus RNA-dependent RNA polymerase expressed in Escherichia coli," Journal of Virology, 73(2), 1649-1654 (1999).	
	DI	FISCHL, M.A., et al., "Zalcitabine compared with zidovudine in patients with advanced HIV-1 infection who received previous zidovudine therapy," Ann. Intern. Med., 18(10):762-769 (1993).	
	DJ	FREED, J.J., et al., "Evidence for acyloxymethyl esters of pyrimidine 5'-deoxyribonucleotides as extracellular sources of ative 5'-deoxyribonucleotides in cultured cells," <i>Biochemical Pharmacology</i> . 38:3193-3198 (1989).	
	DK	GUNIC, E., et al., "Synthesis and cytotoxicity of 4'-C-and 5'-C-substituted Toyocamycins," Bioorg. Med. Chem., 9:163-170 (2001).	
Ψ	DL	HARRY-O'KURU, R.E., J.M. Smith, and M.S. Wolfe, "A short, flexible route toward 2'-C-branched ribonucleosides", J.Org. Chem. 62, 1754-1759 (1997). (Scheme 11).	
TM DM HOSTETL azidothym		HOSTETLER, K.Y., et al., "Synthesis and antiretroviral activity of phospholipids analogs of azidothymidine and other antiviral nucleosides," J. Biol. Chem., 265:6112-6117 (1990)	

Examiner	/marriag Maintoch III / (00/00/2006)	Date	
Signature	/Traviss Mcintosh III/ (08/09/2006)	Considered	08/09/2006

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1440 A /DTO	Substitute for form 1449 A/PTO			Complete if Known	CIPE
Substitute for form 1449/OF TO			Application Number	10/608,907	10.0
INFORMATION	N DISCLO	OSURE	Filing Date	June 27, 2003	1 0 2004
STATEMENT BY APPLICANT		CANT	First Named Inventor	Sommadossi et al.	FEB 1 11 AUG.
lusa an manu si	heets as necessai	n.i	Group Art Unit	Unassigned	E .57
(use as many sr	teets as necessar		Examiner Name	Unassigned	Teron Cini
5	of	7	Attorney Docket Number	iber 06171.105034 IDX 1018	

		3405	734_1
		OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS	
Examiner Initials *	Cite No. 1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	Τ ⁶
TM EA		HOSTETLER, K.Y., et al., "Greatly enhanced inhibition of Human Immunodeficiency Virus Type I replication in CEM and HT4-6C cells by 3'-deoxythymidine diphosphate dimyristoylglycerol, a lipid prodrug of 3'-deoxythymidine," Antimicrob. Agents Chemother., 36:2025.2029 (September 1992).	
	EB	HUNSTON, R.N., et al., "Synthesis and biological properties of some cyclic phosphotriesters drived from 2'-deoxy-5-fluorouridine," J. Med. Chem. 27:440-444 (1984).	
	EC	JONES, G. H.; Moffatt, J. G., Methods in Carbohydrate Chemistry; Whisler, R. L. and Moffatt, J. L. Eds; Academic Press: New York, 1972; 315-322	
	ED	JONES, G. H., et al., "4'-substituted nucleosides. 5. Hydroxymethylation of nucleoside 5'-aldehydes," J. Org. Chem., 44:1309-1317 (1979).	
	EF	KHAMNEI, S., "Neighboring group catalysis in the design of nucleotide prodrugs," J. Med. Chem., 39:4109-4115 (1996).	
	EG	KUCERA, L.S., et al., "Novel membrane-interactive ether lipid analogs that inhibit infectious HIV-1 production and induce defective virus formation," AIDS Res. Hum. Retro Viruses, 6:491-501 (1990).	
	EH	KURTZBERG J., et al., "Differential toxicity of carbovir and AZT to human bone marrow hematopoietic progenitor cells in vitro," Exp. Hematol., 18(10):1094-1096 (1990).	
	EI	LEONARD, N. J., et al., "5-Amino-5-deoxyribose derivatives. Synthesis and use in the preparation of "reversed" nucleosides" J. Heterocycl. Chem., 3:485-489 (December 1966).	
	EJ	LERZA, R, et al., "In vitro synergistic inhibition of human bone marrow hemopoietic progenitor growth by a 3'-azido-3'-deoxy-thymidine, 2',3'-dideoxycytidine combination," Exp. Hematol., 25(3):252-255 (1997).	
	EK	LEWIS W, et al., "Zidovudine induces molecular, biochemical, and ultrastructural changes in rat skeletal muscle mitochondria," J. Clin. Invest., 89(4):1354-1360 (1992).	
	EL	LEWIS, L. D., et al., "Ultrastructural changes associated with reduced mitochondrial DNA and impaired mitochondrial function in the presence of 2'3'-dideoxycytidine," Antimicrob. Agents Chemother., 36(9):2061-2065 (1992).	
	EM	LEWIS, W., et al., "Fialuridine an dits metabolites inhibit DNA polymerase γ at sites of ultiple adjacent analog incorporation, decrease mtDNA abundance, and cause mitochondrial structural defects in cultured hepatoblasts," <i>Proceedings of the National Academy of Sciences, USA</i> , 93(8): 3592-7 (1996).	
V	EN	LOHMANN V., et al., "Biochemical and kinetic analyses of NS5B RNA-dependent RNA polymerase of the Hepatitis C virus," Virology, 249, 108-118 (1998).	
TM	EO	LUH, TY., et al., "A convenient method for the selective esterification of amino-alcohols," Synthetic Communications, 8(5):327-333 (1978).	

	Examiner Signature	/Traviss Mcintosh III/ (08/09/2006)	Date Considered	08/09/2006
--	-----------------------	-------------------------------------	--------------------	------------

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

3405734 1

Approved for use through 10/31/2002. OMB 0651-0031 U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449A/PTO		•		Complete if Known	(IPA)	
		Application Number	10/608,907	101,67		
INFORMATION DISCLOSURE			Filing Date	June 27, 2003		
STATEMENT BY APPLICANT		First Named Inventor	Sommadossi et al.	FEB 1 0 ZUZE OF		
(use as many sheets as necessary)			Group Art Unit	Unassigned	2	
(use as many sieces as necessary)		·y/	Examiner Name	Unassigned	(T)	
6	of	7	Attorney Docket Number	06171.105034 IDX 1018		

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS Examiner Cite Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, No. 1 Initials * journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. FA McCORMICK, J., et al., "Structure and total synthesis of HF-7, a neuroactive glyconucleoside disulfate TM from he funnel-web spide Hololena curta," J. Am. Chem. Soc., 121(24), 5661-5664 (1999). FB MCKENZIE, R., et al., "Hepatic failure and lactic acidosis due to fialuridine (FIAU), an investigational nucleoside analogue for chronic hepatitis B", N. Engl. J. Med., 333(17):1099-1105 (1995). FC MEDINA, D. J., et al., "Comparison of mitochondrial morphology, mitochondrial DNA content, and cell viability in cultured cells treated with three anti-Human Immunodeficiency Virus dideoxynucleosides," Antimicrob. Agents Chemother., 38(8):1824-8 (1994). FD MEIER, C., et al., "Cyclic saligenyl phosphotriesters of 2',3'-dideoxy-2',3'-didehydrothymidine (d4T) – A new pro-nucleic approach." Bioorganic & Med. Chem. Letters 7(2):99-104 (1997). MEYER, R.B., Jr., et al., "2'-O-Acyl-6-thioinosine cyclic 3',5'-phosphates as prodrugs of thioinosinic FE acid," J. Med. Chem. 22: 811-815 (1979). NEIDLEIN, R., et al., "Mild preparation of 1-benzyuloxyiminoalkylphosphonic dichlorides: FF Application to the synthesis of cyclic phosphonic diesters and cyclic monoester amides," Heterocycles 35:1185-1203 (1993). NUTT, R.F., et al., "Branched-chain sugar nucleosides. III. 3'-C-methyladenine", J.Org. Chem., 33:1789-1795 (1968) OLSEN, et al. (Oral Session V, Hepatitis C Virus, Flaviviridae; 16th International Conference on FH Antiviral Research (April 27, 2003, Savannah, Ga.) p A76). FI PAN-ZHOU, X-R, et al., "Differential effects of antiretroviral nucleoside analogs on mitochondrial function in HepG2 cells," Antimicrob. Agents Chemother. 44:496-503 (2000). FJ PIANTADOSI, C., et al., "Synthesis and evaluation of novel ether lipid nucleoside conjugates for anti-HIV-1 activity, " J. Med. Chem. 34:1408-1414 (1991). FK RICHMAN, D.D., et al., "The toxicity of azidothymidine (AZT) in the treatment of patients with AIDS and AIDS-Related Complex," N. Engl. J. Med., 317(4):192-197 (1987). SOMMADOSSI J-P, et al., "Comparison of cytotoxicity of the (-)- and (+)- enantiomer of 2',3'-FL dideoxy-3'-thiacytidine in normal human bone marrow progenitor cells," Biochemical Pharmacology 44(10):1921-1925 (1992). SOMMADOSSI J.-P., et al., "Toxicity of 3'-azido-3'-deoxythymidine and 9-(1,3-dihydroxy-2-**FM** propoxymethyl)guanine for normal human hematopoietic progenitor cells in vitro," Antimicrobial Agents and Chemotherapy, 31:452-454 (1987). STARRETT, J.E.Jr., et al., "Synthesis, oral bioavailability determination, and in vitro evaluation of FN prodrugs of the antiviral agents 9-(2-(phosphonomethoxy)ethyl]adenine (PMEA)," J. Med. Chem. 37: TM 1857-1864 (1994).

Examiner Signature	/Traviss Mcintosh III/ (08/09/2006)	Date Considered	08/09/2006

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ³ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

PTO/SB/08A (08-00) Approved for use through 10/31/2002. OMB 0651-0031

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid contains a valid contains and the contains a valid contains and the contains and the contains a valid contains and the contains a

Substitute for form 1449A/PTO					Complete if Known	101151		
INFORMATION DISCLOSURE				Application Number	10/608,907	()		
				Filing Date	June 27, 2003	FEB 1 0 2004 -		
STATEMENT BY APPLICANT (use as many sheets as necessary)			ICANT	First Named Inventor	Sommadossi et al			
				Group Art Unit	Unassigned	The state of the s	_	
(use as many sneets as necessary)				Examiner Name	Unassigned	41010		
	7	of	7	Attorney Docket Number	06171.105034 IDX	1018	_	

		3403	5734 1						
OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS									
Examiner Initials *	Cite No. 1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	14						
TM	GA	WEINBERG, R.S., et al., "Effect of antiviral drugs and hematopoietic growth factors on in vitro erythropoiesis," Mt. Sinai J. Med. 1998;65(1):5-13.							
TM	GB	YARCHOAN, R., et al. "Long-term toxicity / activity profile of 2',3'-dideoxyinosine in AIDS or AIDS-related complex," <i>The Lancet</i> , 336(8714):526-529 (1990).							
TM	GC	YOSHIDA Y, et al., "Reversal of azidothymidine-induced bone marrow suppression by 2',3'-dideoxythymidine as studied by hemopoietic clonal culture," AIDS Res. Hum. Retroviruses, 6(7):929-932 (1990).	ļ						
TM	GD	ZON, G., "Cyclophosphamide Analogues," Chapter 4 in <u>Progress in Medicinal Chemistry</u> , Vol. 19, G.P. Ellis and G.B. West, Eds., pp. 205-246 (1982).							

3405734_1

	, _ · · · · ·	`		
Examiner Signature	/Traviss Mcintosh III/	(08/09/2006)	Date Considered	08/09/2006

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ³ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.